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### The Causes of Water Pollution

Water is considered to be one the most important things for human life on Earth. We need it in our homes to cook and to clean. We need it in industry to wash, process, cool, transport products, and it is an important ingredient in many products. In both the home and industry, it is used for sanitation – we need water supply for toilets, faucets, baths, and showers. Without water, life as we know it would not function properly. It seems that water is limitless: over 70 percent of the earth is covered in water. It makes up our oceans, lakes, ponds, rivers, and streams. It even flows beneath the earth's surface. Not all of that water, however, is usable. In fact, "less than 1% of the world's fresh water (or about 0.007% of all water on earth) is readily accessible for direct human use" ("Water Fact," par. 1). This amount of water is so little compared to the demand for water. In addition, the little water that is available is becoming more and more polluted, which has created what scientists call the "water conservation crisis." Water pollution happens because of the emission of toxic waste by households and industry, and this pollution is spread by natural calamity which leads to water-borne illnesses all over the world. People need to use water for many purposes in households and also in factories. People's usage of water in households and factories lead to two major ways that water becomes polluted: the emission of toxic waste into water and natural calamity; this also causes diseases which can affect people's health.

The first circumstance that causes water to become polluted is human dumping of chemical products or toxic waste into water. Many chemical products are used a lot in households. In the book, *The Water Crisis: Constructing Solutions to Freshwater Pollution* by Julia Stauffer: she mentions that a lot of toxic in water comes from products that are used in urban households: cleaning products, bleach, paints, solvents, lawn and garden chemicals, petrol, antifreeze and motor oil (58). Most of the time when people finish using those products, they dispose of them down the drains. This habit of humans is leading to the pollution of more water resources, but there are some solutions that people can perform to decrease the toxic waste in water.

The ways to reduce the toxic waste in water might not be easy because people have formed habits in everyday life. However, Stauffer suggests that people should use non-toxic cleaning products for cleaning and also avoid using lawn and garden chemicals. In some urban areas, people can only use a limited amount of pesticide. Moreover, after creating hazardous waste, people should dispose of it in the hazardous waste disposal (58). People should consider the chemical products they use in the household because those products can cause bad effect on water and can lead to some health problems.

In addition, people in households are not only one who should beware of chemical products; people in factories should also beware of them. Many factories around the world use chemical products to produce their products. These chemicals are not only disposed into water, but are also diffused into air. The more toxic products spread into the air; the more air pollution will be. Air pollution can cause the climate to change and one natural calamity that comes with air pollution is acid rain. Acid rain is caused by the emission of some chemicals from factories. The emissions of chemicals from the factories “contain sulphur dioxide and nitrogen dioxide, which are converted to sulphuric and nitric acid in the atmosphere” (Stauffer 24). As a result, acid rain can reduce amount of pH in a body of water, which causes young fish and other species in the water to die (Stauffer 24). Moreover, when the pH in water drops more and more, “the water becomes undrinkable” (Stauffer 135). Not only acid rain that can causes water to become polluted, but other natural calamities such as hurricanes, typhoons, or tornadoes can also pollute the water. Polluted water can cause many diseases to human and can also harm other living organisms.

Both emission of toxic waste and natural calamity can lead to the cause of many water-borne diseases. For instance, the Tsunami or Boxing Day Tsunami which occurred in 2004 in the Asia-Pacific region (“Tsunami” par. 32): caused flood which led to the flow of sanitation. From this calamity, many water resources got more polluted, so people have higher risk to get water-borne diseases. In one year, many people go to hospital to get treatment for water-related diseases. According to the Water Partners International organization, “88 percent of all diseases are caused by unsafe drinking water, inadequate sanitation and poor hygiene” (“Water Fact” par. 14). One specific disease is caused by nitrate from water, which is called “blue baby syndrome.” Stauffer explains that when nitrate from acid rain reaches ground water it can cause a health risk: “Nitrates in drinking water can cause ‘blue baby’ syndrome, a condition where an infant’s red blood cells can’t carry enough oxygen to the body” (134). People need water in order to survive, but if the water becomes more polluted, people will have less clean water and water could make them sick. This problem could lead to the problem of inadequate water supply in the future.

In these days, the amount of water around the world is decreasing gradually due to population growth and demand for water. Some parts of the world are already facing the problem of the inadequate supply of water. Mostly, the countries that face this problem also face the problem of diseases from water. If the water gets polluted more and more, the water in the world that people can directly use will be less than the demand of water in the next ten or twenty years. Polluted water not only harms humans, but it is also harms other living things. Due to the problems over polluted water, people should be aware of the chemicals products that they use and try not to dispose them into water. In addition, the government should limit the amount of toxic waste that factories dispose of into water. Lastly, if people can help to keep water clean; natural calamities will not happen so often because the environment on earth will be cleaner.

#### Works Cited

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